Ambient Surface Water Quality Monitoring Network (ASWMN)

The Ambient Surface Water Quality Monitoring Network is a cooperative DEP/USGS program, established in the mid-1970's. A major redesign of the network occurred in 1997. The revised network was specifically designed to address surface water quality issues in each of the state's 20 watershed management areas through the following objectives: (1) track status and trends in ambient water quality; (2) establish background water quality; (3) obtain water quality data that can be correlated with specific land uses (urban/suburban, agricultural and undeveloped); and (4) coordinate water chemistry and biological networks.

The network is comprised of 4 station types : (1) *background/reference* – waterways located in undeveloped watersheds (generally county, state or federal parks and forests), (2) *land use indicator sites* – waterways which reflect a dominant land use (urban/suburban, agricultural or undeveloped) within a watershed management area, (3) *watershed integrator sites* – waterways which reflect large drainage areas and multiple pollution sources and (4) *statewide status sites* – 40 sites randomly reselected every two years from DEP's 800 station biological (macroinvertebrate - AMNET) network. The network consists of 115 stations which are sampled quarterly.

Parameters monitored include the following:
> Measured quarterly – flow, field parameters, total and filtered nutrients, filtered common ions

> Measured five times within 30 days – bacterial indicators

> Measured annually at selected sites – diurnal dissolved oxygen (DO), filtered organic pesticides, total recoverable metals, volatile organic compounds, sediment metals and sediment polyaromatic hydrocarbons.

The data collected via this Network are used in assessments for the New Jersey Integrated Water Quality Monitoring and Assessment Report (formerly referred to as the 305(b) Water Quality Inventory Report and the 303(d) Impaired Waterbodies List). Network data are available from the following sources: (1) the USGS computerized data system, NWIS (http://nj.usgs.gov), (2) EPA's computerized data system, STORET, and (3) USGS annual reports " Water Resources Data – New Jersey". Additional information on this monitoring network is available from the Bureau of Freshwater & Biological Monitoring's webpage (www.state.nj.us/dep/wmm/bfbm).

New Jersey's Surface Water Quality Monitoring Network 2003
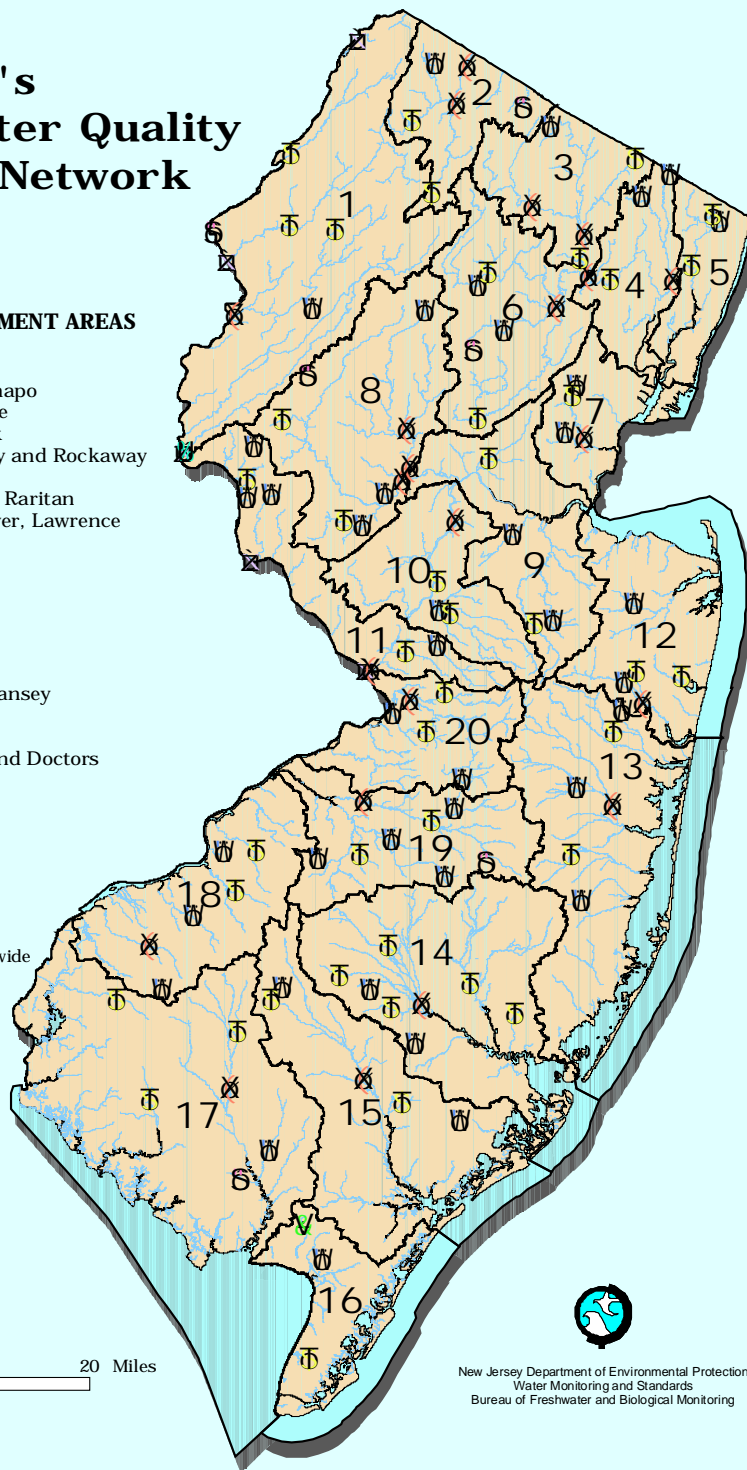
WATERSHED MANAGEMENT AREAS
1. Upper Delaware
2. Wallkill
3. Pompton, Wanaque, Ramapo
4. Lower Passaic and Saddle
5. Hackensack and Pascack
6. Upper Passaic, Whippany and Rockaway
7. Arthur Kill
8. North and South Branch Raritan
9. Lower Raritan, South River, Lawrence
10. Millstone
11. Central Delaware
12. Monmouth
13. Barnegat Bay
14. Mullica
15. Great Egg Harbor
16. Cape May
17. Maurice, Salem and Cohansey
18. Lower Delaware
19. Rancocas
20. Assiscunk, Crosswicks and Doctors

LEGEND
Monitoring Station Type

Background
Delaware River Mainstem
Land Use Indicator
Land Use Indicator/Statewide Status
Statewide Status
Watershed Integrator
Watershed Integrator/ Statewide Status

Watershed Management Areas
Major River/Stream

20   0   20   Miles

New Jersey Department of Environmental Protection
Water Monitoring and Standards
Bureau of Freshwater and Biological Monitoring